

first things first, get the car on axle stands and the wheels off. Open the bonnet to let more light through to the area in which you'll be working. The following guide shows the passenger side being done as it's the more difficult out of the two due to restricted access.

Once the wheel's off, turn the steering wheel to full lock as though you're turning right - this gives you better access to the track-rod-end. Then, you need to mark the nut that locks the track-rod-end and the steering rack, either with a white marker, or nick them with a hacksaw blade - this is to ensure you can line the track-rod-end back up when its been off the shaft. The kit came with a little plastic cone that was supposed to eliminate the need for removing the track-rod-end, but I just couldn't get it to work.



undo the nut on the bottom of the track rod end, sometimes there's a split pin/castellated nut combo, sometimes its a nyloc - to help undoing it might be worth giving it a good WD40 soak before. Now comes the bit that some people find difficult, splitting the track-rod-end from its taper. I've seen this done in many different ways, sometimes by putting a piece of wood over the threaded end and giving it a hefty smack (NOT recommended as you can damage the threads meaning its a new track-rod-end) sometimes by using a specialist tool such as a ball joint splitter (expensive and not readily available) but the method I use is with 2 hammers - the heavier the better



what you need to do is hit the taper housing as hard as you can with your hammers AT THE SAME TIME and at a slight angle, what will happen is you will "squeeze" the housing allowing the track-rod-end to slip free, don't worry about damaging the housing, you won't be able to hit it hard enough. It might take a few smacks, but so long as you hit each side HARD at the same time the track-rod-end will come loose



Undo the track-rod-end retaining nut using a 17mm spanner, again a liberal spray of WD40 will help, making sure you've marked the relative positions of the nut and the shaft BEFORE you undo it, then remove the track-rod-end and keep safe cos it's going back on

OK - looking at the boot now you'll see where it has split and completely come away from the rack housing



remove the old boot, it doesn't matter how - I used a stanley knife to cut it away, but you might struggle to cut the retaining clips off, especially at the rack housing end as there isn't much room. I could have done with the hands of an 8 year old child here, but seeing as how I don't have any 8 year old children I just went through the top of the engine bay in front of the battery and ragged the old clips off. Sorry no pics here, forgot to take one!

Take your new boot (pictured below) and you'll see at one end there's what looks like "steps" - this is because these are universal boots that cater for different sizes of steering rack



the small end (on the left in this picture) doesn't need trimming down, but the larger end does (on the right side of the picture) so get some scissors and cut away the first 2 "steps", making sure you stick to the outside ridge of the "step" - picture shows the start of the cut before completely removing the excess rubber



next, take a tyrap (should be supplied in the kit) and form it into a loose loop AROUND THE STEERING RACK as in the picture



take your looped tyrap and place it as far up the steering rack shaft as you can, the reason for this is it makes it a DAMN site easier to tightnen up once the boot's on - you can also see my white mark on the steering shaft telling me that this is where the shaft was prior to the removal of the track-rod-end



slip your new boot over the end of the steering rack shaft, large hole (the one you trimmed earlier) first - it's worth noting that a good old spray of WD40 on the inside of the boot will help here. Some people will say that you should fill the boot with grease, but the general consensus after a good old google and speaking to a couple of mechanic friends is this isn't really necessary as the boots are there simply to act as dust covers to prevent grit and sh*t from getting into the steering rack - though I'm sure someone else will be along in a minute to contradict



push the boot as far up the steering shaft as you can get it, it's also worth dialling the opposite full lock as this will help with the fitting

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this is where it gets a little tricky, the aim is quite simple but there's restricted access - all you're trying to do is slide the end of the boot completely over the end of the steering housing. Once over grab the tyrap you looped earlier (see how much easier this is than trying to loop it now?) and making sure the boot is on all the way round pull the tyrap closed as tight as you can



now go the small end of the boot and fix the tyrap on this end - a lot easier!!

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view from above of the finished article

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refit the track-rod-end, making sure your marks line up like in this shot

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Now dial up the opposite lock again, thus moving the track-rod-end back out in the opposite direction again, refit the track-rod-end into its taper, then tighten the track-rod-end retaining nut back up to torque, and if you have one refit the retaining pin - if your nuts are nyloc then ideally you should replace them for new ones as strictly speaking they shouldn't be re-used. Head off over to the other side and repeat - you'll find there's more room on that side so won't/shouldn't have to lean in through the engine bay to gain access. Refit your wheels, remove your axle stands and that's it - job done. Both sides took me an hour and that included taking pictures and stopping for a brew. Strictly speaking you should now get your tracking/alignment checked as the track-rod-ends have been off, but the last 2 times I've done this using this method the tracking was still in.